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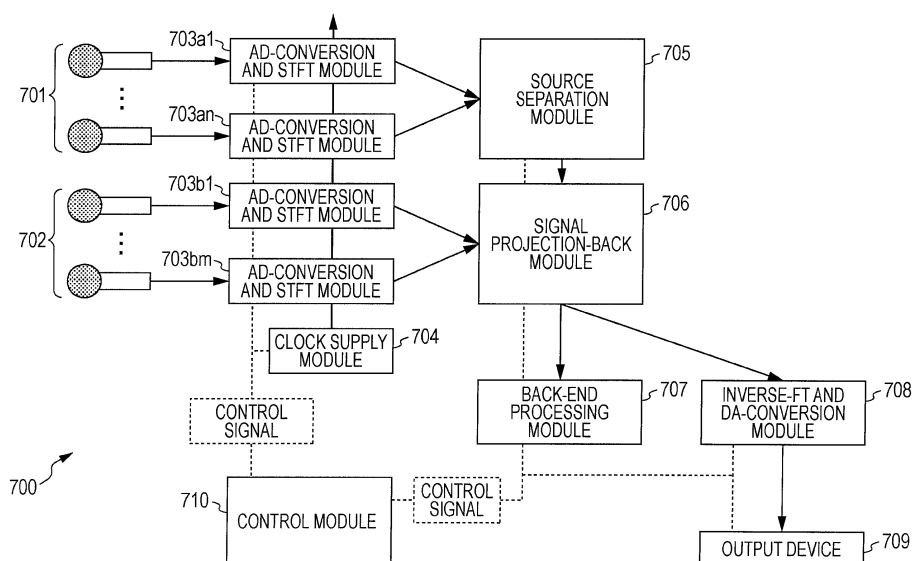
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(54) **Signal processing apparatus, signal processing method, and program**

(57) A signal processing apparatus includes a source separation module (705) for producing respective separation signals corresponding to a plurality of sound sources by applying an ICA (Independent Component Analysis) to observation signals produced based on mixture signals from the sound sources, which are taken by source separation microphones (701), to thereby execute a separation process of the mixture signals, and a signal projection-back module (706) for receiving obser-

vation signals of projection-back target microphones (702) and the separation signals produced by the source separation module (705), and for producing projection-back signals as respective separation signals corresponding to the sound sources, which are taken by the projection-back target microphones (702). The signal projection-back module (706) produces the projection-back signals by receiving the observation signals of the projection-back target microphones (702) which differ from the source separation microphones (701).

FIG. 7





## EUROPEAN SEARCH REPORT

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EP 10 15 7330

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	UKAI S ET AL: "Multistage simo-model-based blind source separation combining frequency-domain ICA and time-domain ICA", ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, 2004. PROCEEDINGS. (ICASSP ' 04). IEEE INTERNATIONAL CONFERENCE ON MONTREAL, QUEBEC, CANADA 17-21 MAY 2004, PISCATAWAY, NJ, USA, IEEE, PISCATAWAY, NJ, USA, vol. 4, 17 May 2004 (2004-05-17), pages 109-112, XP010718417, DOI: 10.1109/ICASSP.2004.1326775 ISBN: 978-0-7803-8484-2 * abstract; figure 1 *	1-12	TECHNICAL FIELDS SEARCHED (IPC)  G10L
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 24 October 2013	Examiner Zimmermann, Elko
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04G01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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